Tire Science and Technology
Index to Volume 30
2002

Number	Months	Pages
1	Jan.–Mar.	1–64
2	Apr.–Jun.	65–134
3	Jul.–Sep.	135–212
4	Oct.–Dec.	213–294

A

Aspiration-level indicator
Application of STOM to the Optimal Tire Contour Design by Introducing the Aspiration-level Indicator, Oct.–Dec., 265

B

Bagdonavičius, V., Bikelis, A., and Kazakevicius, V.: Estimation of Tire Wear and Traumatic Event Intensities, Oct.–Dec., 214

Bekar, I., Fatt, M. S. H., and Padovan, J.: Deformation and Fracture of Rubber under Tensile Impact Loading, Jan.–Mar., 45

Belluzzo, D., Mancosu, F., Sangali, R., Cheli, F., and Bruni, S.: New Predictive Model for the Study of Vertical Forces (up to 250 Hz) Induced on the Tire Hub by Road Irregularities, Jan.–Mar., 2

C

Chen, B.: Influences of Thermo-Mechanical Properties of Polymeric Cords on Tires with and without Post-Cure Inflation, July–Sept., 156

Cho, J. R., Jeong, H. S., Kim, N. J., and Kim, K. W.: Application of STOM to the Optimal Tire Contour Design by Introducing the Aspiration-level Indicator, Oct.–Dec., 265

Clear test
Finite Element Modelling of Rotating Tires in the Time Domain, Jan.–Mar., 19

Compaction
Analysis of Tire Models for Rolling on a Deformable Substrate, July–Sept., 180

Computational fluid dynamics
Application of Finite Element Analysis and Computational Fluid Dynamics to ATV Tire Design, July–Sept., 198

Computer simulations
New Predictive Model for the Study of Vertical Forces (up to 250 Hz) Induced on the Tire Hub by Road Irregularities, Jan.–Mar., 2

D

Darnell, I., Mousseau, R., and Hulbert, G.: Analysis of Tire Force and Moment Response During Side Slip Using an Efficient Finite Element Model, April–June, 66

Deformation
Analysis of Tire Models for Rolling on a Deformable Substrate, July–Sept., 180

Degradation
Estimation of Tire Wear and Traumatic Event Intensities, Oct.–Dec., 214

E

Elastomer
Non-linear Hysteretic Characterization of Elastomers under Multi-axial Loading Conditions, Jan.–Mar., 34

F

Finite element
Analysis of Tire Force and Moment Response During Side Slip Using an Efficient Finite Element Model, April–June, 66
Analysis of Tire Models for Rolling on a Deformable Substrate, July–Sept., 180
Application of Finite Element Analysis and Computational Fluid Dynamics to ATV Tire Design, July–Sept., 198
Finite Element Modelling of Rotating Tires in the Time Domain, Jan.–Mar., 19
Finite element analysis
The Finite Element Approach to Predict the Plysteer Residual Cornering Force of Tires, April–June, 122
New Predictive Model for the Study of Vertical Forces (up to 250 Hz) Induced on the Tire Hub by Road Irregularities, Jan.–Mar., 2
Finite element modeling
Stress Analysis of the Multi-Layered System of a Truck Tire, Oct.–Dec., 240
Force and movement
Analysis of Tire Force and Moment Response During Side Slip Using an Efficient Finite Element Model, April–June, 66
Fracture behavior
Deformation and Fracture of Rubber under Tensile Impact Loading, Jan.–Mar., 45
Friction
The Finite Element Approach to Predict the Plysteer Residual Cornering Force of Tires, April–June, 122
Friction energy
A Correlation Between Rolling Tire Contact Friction Energy and Indoor Tread Wear, April–June, 83

G

Gurvich, M. R., Andonian, A. T., and Shaw, C.: Non-linear Hysteretic Characterization of Elastomers under Multi-axial Loading Conditions, Jan.–Mar., 34

H

Hysteretic characterization
Non-linear Hysteretic Characterization of Elastomers under Multi-axial Loading Conditions, Jan.–Mar., 34

I

Indoor tire wear
Vehicle and Course Characterization Process for Indoor Tire Wear Simulation, April–June, 100
Indoor wear
A Correlation Between Rolling Tire Contact Friction Energy and Indoor Tread Wear, April–June, 83
Irregular wear
Vehicle and Course Characterization Process for Indoor Tire Wear Simulation, April–June, 100

K

Kao, B. G.: Tire Vibration Modes and Tire Stiffness, July–Sept., 136
Knisley, S.: A Correlation Between Rolling Tire Contact Friction Energy and Indoor Tread Wear, April–June, 83

M

Maneuverability and durability
Application of STOM to the Optimal Tire Contour Design by Introducing the Aspiration-level Indicator, Oct.–Dec., 265
Material parameters
Non-linear Hysteretic Characterization of Elastomers under Multi-axial Loading Conditions, Jan.–Mar., 34
Mobility
Analysis of Tire Models for Rolling on a Deformable Substrate, July–Sept., 180
Model
Analysis of Tire Models for Rolling on a Deformable Substrate, July–Sept., 180
Modelling
Finite Element Modelling of Rotating Tires in the Time Domain, Jan.–Mar., 19
Multi-axial cyclic loading
Non-linear Hysteretic Characterization of Elastomers under Multi-axial Loading Conditions, Jan.–Mar., 34
Multi-layered system
Stress Analysis of the Multi-Layered System of a Truck Tire, Oct.–Dec., 240
Multi-objective optimization
Application of STOM to the Optimal Tire Contour Design by Introducing the Aspiration-level Indicator, Oct.–Dec., 265

N

Non-linear analysis
Non-linear Hysteretic Characterization of Elastomers under Multi-axial Loading Conditions, Jan.–Mar., 34
Non-parametric estimation
Estimation of Tire Wear and Traumatic Event Intensities, Oct.–Dec., 214

O

Off-road
Analysis of Tire Models for Rolling on a Deformable Substrate, July–Sept., 180

Ohishi, K., Suita, H., and Ishihara, K.: The Finite Element Approach to Predict the Plysteer Residual Cornering Force of Tires, April–June, 122
Olatunbosun, O. A. and Burke, A. M.: Finite Element Modelling of Rotating Tires in the Time Domain, Jan.–Mar., 19

P

Parametric estimation
Estimation of Tire Wear and Traumatic Event Intensities, Oct.–Dec., 214
Path model
Estimation of Tire Wear and Traumatic Event Intensities, Oct.–Dec., 214
Plysteer residual cornering force
The Finite Element Approach to Predict the Plysteer Residual Cornering Force of Tires, April–June, 122
Post-cure inflation
Influences of Thermo-Mechanical Properties of Polymeric Cords on Tires with and without Post-Cure Inflation, July–Sept., 156

R

Residual reliability
Estimation of Tire Wear and Traumatic Event Intensities, Oct.–Dec., 214
Road irregularities
New Predictive Model for the Study of Vertical Forces (up to 250 Hz) Induced on the Tire Hub by Road Irregularities, Jan.–Mar., 2
Rolling contact
A Correlation Between Rolling Tire Contact Friction Energy and Indoor Tread Wear, April–June, 83
Rooney, T., Satrape, J., Lin, S.: Application of Finite Element Analysis and Computational Fluid Dynamics to ATV Tire Design, July–Sept., 198
Rotation
Finite Element Modelling of Rotating Tires in the Time Domain, Jan.–Mar., 19

S

SBR tensile impact tests
Deformation and Fracture of Rubber under Tensile Impact Loading, Jan.–Mar., 45
Semi-parametric estimation
Estimation of Tire Wear and Traumatic Event Intensities, Oct.–Dec., 214
Shear energy intensity
A Correlation Between Rolling Tire Contact Friction Energy and Indoor Tread Wear, April–June, 83
Shoop, S., Darnell, I., and Kestler, K.: Analysis of Tire Models for Rolling on a Deformable Substrate, July–Sept., 180
Side slip
Analysis of Tire Force and Moment Response During Side Slip Using an Efficient Finite Element Model, April–June, 66
Sidewall carcass contour

Application of STOM to the Optimal Tire Contour Design by Introducing the Aspiration-level Indicator, Oct.–Dec., 265
Simulation
Finite Element Modelling of Rotating Tires in the Time Domain, Jan.–Mar., 19
Soil
Analysis of Tire Models for Rolling on a Deformable Substrate, July–Sept., 180
Stalnaker, D. O. and Turner, J. L.: Vehicle and Course Characterization Process for Indoor Tire Wear Simulation, April–June, 100
Steady state rolling
The Finite Element Approach to Predict the Plysteer Residual Cornering Force of Tires, April–June, 122
STOM
Application of STOM to the Optimal Tire Contour Design by Introducing the Aspiration-level Indicator, Oct.–Dec., 265

T

Terrain
Analysis of Tire Models for Rolling on a Deformable Substrate, July–Sept., 180
Thermal-mechanical properties
Influences of Thermo-Mechanical Properties of Polymeric Cords on Tires with and without Post-Cure Inflation, July–Sept., 156
Thermal shrinking
Influences of Thermo-Mechanical Properties of Polymeric Cords on Tires with and without Post-Cure Inflation, July–Sept., 156
Tire
Analysis of Tire Force and Moment Response During Side Slip Using an Efficient Finite Element Model, April–June, 66
Analysis of Tire Models for Rolling on a Deformable Substrate, July–Sept., 180
Estimation of Tire Wear and Traumatic Event Intensities, Oct.–Dec., 214
The Finite Element Approach to Predict the Plysteer Residual Cornering Force of Tires, April–June, 122
Finite Element Modelling of Rotating Tires in the Time Domain, Jan.–Mar., 19
Tire cords
Influences of Thermo-Mechanical Properties of Polymeric Cords on Tires with and without Post-Cure Inflation, July–Sept., 156
Tire dynamics
Tire Vibration Modes and Tire Stiffness, July–Sept., 136
Tire model
Application of Finite Element Analysis and Computational Fluid Dynamics to ATV Tire Design, July–Sept., 198
Stress Analysis of the Multi-Layered System of a Truck Tire, Oct.–Dec., 240
Tire Vibration Modes and Tire Stiffness, July–Sept., 136
Tire stiffness
Tire Vibration Modes and Tire Stiffness, July–Sept., 136
Traumatic failure
Estimation of Tire Wear and Trau-

matic Event Intensities, Oct.–Dec., 214
Tread pattern modeling
The Finite Element Approach to Predict the Plysteer Residual Cornering Force of Tires, April–June, 122
Treadwear
A Correlation Between Rolling Tire Contact Friction Energy and Indoor Tread Wear, April–June, 83
Tread wear
Vehicle and Course Characterization Process for Indoor Tire Wear Simulation, April–June, 100
Truck tire
Stress Analysis of the Multi-Layered System of a Truck Tire, Oct.–Dec., 240

V

Vehicle characterization
Vehicle and Course Characterization Process for Indoor Tire Wear Simulation, April–June, 100
Vehicle comfort
New Predictive Model for the Study of Vertical Forces (up to 250 Hz) Induced on the Tire Hub by Road Irregularities, Jan.–Mar., 2
Vehicle dynamics
Tire Vibration Modes and Tire Stiffness, July–Sept., 136
Vehicle pull
The Finite Element Approach to Predict the Plysteer Residual Cornering Force of Tires, April–June, 122
Very high strain rate deformation
Deformation and Fracture of Rubber under Tensile Impact Loading, Jan.–Mar., 45
Virtual wear
A Correlation Between Rolling Tire Contact Friction Energy and Indoor Tread Wear, April–June, 83

W

Wheel
Analysis of Tire Models for Rolling on a Deformable Substrate, July–Sept., 180

Z

Zhang, X., Rakheja, S., and Ganesan, R.: Stress Analysis of the Multi-Layered System of a Truck Tire, Oct.–Dec., 240